3.2 AGRICULTURAL RESOURCES

This section addresses the potential impacts associated with the voluntary conversion of agricultural land that is Important Farmland (defined in Table 3.2-1), zoned for agricultural use, or subject to Williamson Act contracts. It also addresses potential impacts to agriculture due to the proximity of established habitat. This analysis meets the requirements of the Farmland Protection Policy Act (7 U.S.C. 4201) on a programmatic basis. This Act is the Federal statute that provides the basis for the policy of avoiding impacts from Federal programs. The Act does not prohibit Federal agencies from undertaking actions that convert farmland to nonagricultural use, but only requires that Federal agencies "identify and take into account the adverse effects of Federal programs on the preservation of farmland; consider alternative actions, as appropriate, that could lessen such adverse effects; and assure that such Federal programs, to the extent practicable, are compatible with State (and local) programs and policies to protect farmland" (7 U.S.C. §4202[b]). The following analysis identifies and takes into account the potential effects of the proposed Conservation Plan on farmland in the whole planning area, considers alternative actions that could lessen those effects, and also assures that the Conservation Plan is compatible with state and local programs "to the extent practicable."

3.2.1 Affected Environment

Individual counties and municipalities regulate agricultural land uses primarily through the adoption of land use plans, policies, and agricultural zoning that restrict the location, type, and intensity of land development and use that is allowed. The California Department of Conservation (CDOC) has the primary responsibility for regulation and reporting related to California agricultural lands. Administering agencies in Arizona and Nevada are the Arizona Department of Agriculture and the Nevada Division of Agriculture. Agricultural resources on tribal lands are governed by the tribal governments.

The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS), has defined Important Farmlands based upon a number of factors, including the physical and chemical characteristics of the land and the suitability of the land for producing crops (refer to Table 3.2-1 for these definitions). Important Farmlands are afforded special protection due to their importance to agricultural production.

3.2.1.1 Lower Colorado River

Important Farmland

The discussion of farmland present in the planning area is based on multiple sources, including Reclamation's LCRAS, CDOC, NRCS, and Yuma County. Important Farmland has not been mapped for all of the planning area; thus, LCRAS data, which do not distinguish between Important Farmland and other farmland, are used to give an overview of lands that are classified as agricultural. LCRAS defines agricultural areas as cultivated fields or fields that will be cultivated in the future, as well as all areas that are irrigated via a canal vs. a municipal water source, which could include non-agricultural areas such as grass fields and other areas. The

vast majority of the planning area that is classified as agricultural is, however, used for agricultural purposes (personal communication, K. Zander 2003).

Table 3.2-1. General Definitions of Categories Used in Important Farmland Maps[1]

Farmland Category	*Definition*
Prime Farmland[1]	Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water). It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, Prime Farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks.
Unique Farmland	Unique Farmland is land other than Prime Farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods.
Farmland of Statewide Importance[1]	This is land, in addition to Prime and Unique Farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops. Criteria for defining and delineating this land are to be determined by the appropriate State agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly Prime Farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as Prime Farmlands if conditions are favorable.
Farmland of Local Importance	In some local areas there is concern for certain additional farmlands for the production of food, feed, fiber, forage, and oilseed crops, even though these lands are not identified as having national or statewide importance. Where appropriate, these lands are to be identified by the local agency or agencies concerned.
Grazing Land[1]	Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
Urban and Built-up Land	A Land Cover/Use category consisting of residential, industrial, commercial, and institutional land; construction sites; public administrative sites; railroad yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment plants; water control structures and spillways; other land used for such purposes; small parks (less than 10 acres) within urban and built-up areas; and highways, railroads, and other transportation facilities if they are surrounded by urban areas. Also included are tracts of less than 10 acres that do not meet the above definition but are completely surrounded by Urban and Built-up land. Two size categories are recognized in the National Resources Inventory (NRI): (1) areas 0.25 to 10 acres, and (2) areas greater than 10 acres.
Other Land	Land not included in any other mapping category. Common examples include low wetland and riparian areas.
Water	A General cover category consisting of permanent water, such as a perennial stream, lake, or pond with at least 25 percent open water. If the vegetative canopy obscures more than 75 percent of the water surface from view, the area is recorded under the category appropriate for the canopy vegetation. Four types of water areas are large streams, large water bodies, small streams, and small water bodies.
Notes:	1. The definitions for Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Urban Built-up Land were developed by the USDA-SCS as part of the nationwide Land Inventory and Monitoring (LIM) system. The LIM definitions have been modified for use in California with the most significant modification being that Prime Farmland and Farmland of Statewide Importance must be irrigated. In addition, mapping of Grazing Land as part of an Important Farmland Map is unique to California.
Sources:	7 CFR 657.5; NRI 1997; CDOC 2003; CDOC undated.

Table 3.2-2 shows the amount of agricultural land contained within each reach based on LCRAS data. No agricultural land is mapped in Reaches 1, 2, and 5. The river in Reaches 1 and 2 is generally bordered by cliffs, rather than the broad plains that are conducive to agricultural uses; and Reach 5 consists primarily of publicly owned land, most of which is managed by the Service as a wildlife refuge or by the State of California as a recreation area. The largest amount of agricultural land is in Reach 4 (170,048 acres), followed by Reach 7 (43,965 acres), Reach 6 (36,803 acres), and Reach 3 (18,186 acres). Agricultural land comprises 38 percent of the total land within the planning area.

Table 3.2-2. Agricultural Land by River Reach (2003)

River Reach	*Agricultural Land (acres)*	*Percentage of Reach*
Reach 3	18,186	20
Reach 4	170,048	59
Reach 6	36,803	56
Reach 7	43,965	71
Total	**269,002**	**—**

Source: USBR 2003a.

Important Farmland has been mapped in Imperial, Riverside, and Yuma counties and is shown by reach on Table 3.2-3. The greatest amount of Important Farmland is located in Reach 4 (113,284 acres), followed by Reach 7 (60,492 acres), Reach 6 (50,184 acres), and Reach 5 (245 acres). Since the LCRAS uses a different level of detail than the system used for mapping Important Farmland, in some cases, general agricultural land may not have been included in the totals for Important Farmlands and conversely, Important Farmland, such as that located in Reach 5 may not have been included in the agricultural area totals shown on Table 3.2-2.

Table 3.2-3. Known Important Farmland within the Planning Area (acres)

	Prime Farmland	*Unique Farmland*	*Farmland of Statewide Importance*	*Farmland of Local Importance*	*Percentage of Reach*
Reach 4	70,544	564	36,000	6,176	40
Reach 5	—	—	245[1]	—	<1
Reach 6	39,793	1,366	4,619	4,406	77
Reach 7	55,027	2,875	2,590	0	96
Total	**165,364**	**4,805**	**43,454**	**10,582**	**—**
Percentage of Reaches 1-7	**23**	**0.67**	**6.1**	**1.5**	**—**

Notes: [1]Includes Yuma County only (Yuma County 2003).
Sources: CDOC, Division of Land Resource Protection 2000; NRCS 2002; Yuma County 2003.

The amount of land in agricultural use in the planning area has undergone only a minor overall decline during the last 10 years. Table 3.2-4 shows the difference in the amount of agricultural land present in those reaches containing agricultural land in 1993 and 2003. The greatest change occurred in Reach 7, where agricultural land declined by 4.9 percent during this period (USBR 2003a). Minor increases in agricultural land occurred in Reaches 3 and 4 during the same period. Information regarding the conversion of Important Farmland is not available for the planning area.

Table 3.2-4. Agricultural Land Conversion Between 1993 and 2003 in the Planning Area

River Reach	*Agricultural Land in 1993 (acres)*	*Agricultural Land in 2003 (acres)*	*Change in Amount of Agricultural Land (acres)*	*Percent Change in Agricultural Land*
Reach 3	18,120	18,186	66	.36
Reach 4	169,857	170,048	191	.11
Reach 5	0	0	0	—
Reach 6	37,500	36,803	-697	-1.9
Reach 7	46,207	43,965	-2242	-4.9
Total	**271,684**	**269,002**	**-2682**	**-.99**

Source: USBR 2003a.

Land Zoned for Agricultural Use

This section identifies the portions of the planning area that contain substantial amounts of land zoned for agricultural use, as well as the generally allowed uses in these zoning districts. State and Federal agencies are not subject to local land use and zoning regulations, but they do take these into consideration and cooperate with local agencies to avoid conflicts to the extent feasible.

REACH 1

Reach 1 consists primarily of lands administered by the NPS and the Hualapai Indian Reservation. The remaining portion of the reach is located within Clark County and is zoned as Rural Open Land District (R-U); however, this reach contains no agricultural land.

REACH 2

Reach 2 consists primarily of lands administered by the NPS. The remaining portion of the reach is located within Clark County, and most of this land is zoned R-U; however, this reach contains no agricultural land.

REACH 3

Most of the portion of Reach 3 located within Clark County is zoned R-U. The R-U district provides for appropriate uses of vast areas of rural land, which would include the proposed Conservation Plan. Fish rearing ponds normally would be allowed under a Special Use Permit (personal communication, C. Pulsipher 2003). The Mohave County portion of Reach 3 includes General Agricultural (A) and Agricultural Residential (A-R) zoning. The A zone allows for all agricultural uses, as well a variety of residential and commercial uses. The A-R zone is primarily designed for agricultural uses, but other uses, such as single-family dwellings, schools, and churches, also are allowed. Although open space/wildlife habitat areas are not expressly permitted, they would be considered compatible uses in these zones (personal communication, B. Delmar 2003).

REACH 4

Within the portion of this reach that is in Riverside County, the zoning is mainly Agriculture (A-1 and A-2). These zones allow single family dwellings and numerous other uses, primarily related to agricultural production, such as water works facilities for the production and distribution of water for irrigation purposes, field crops, nurseries, greenhouses, farming operations, wineries, and grazing. Any use that is not specifically listed may be considered a permitted or conditionally permitted use provided that the Planning Director finds that the proposed use is substantially the same in character and intensity as those listed. Agricultural zones permit other uses if they are found to have substantially the same character and intensity as expressly permitted uses and would allow the development of habitat for wildlife (personal communication, P. Clark 2003).

Zoning in the Imperial County portion of Reach 4 is primarily General Agriculture (A-2). The purpose of the A-2 zone is to designate areas that are suitable and intended primarily for agricultural uses and agricultural related compatible uses. Uses include all agricultural and grazing uses; aquaculture to allow for the growing and harvesting of algae, fish, frogs, shrimp, and similar aquatic products; and some residential development. Although habitat for wildlife (other than fish farms, which are identified as an allowable use) is not expressly permitted, conservation areas would likely be allowed in these areas if there were no anticipated conflicts with agricultural operations (Imperial County 1998).

In the City of Blythe, the zoning is primarily Agriculture (A), which allows for the cultivation of land and for associated uses commonly tied to agriculture, including grazing. Residential uses also are allowed. Conservation areas would likely be considered an allowable use (City of Blythe 2003).

La Paz County zoning maps are being revised to obtain consistency with the county's first Comprehensive Plan, which is currently being developed. Therefore, accurate zoning information for La Paz County is currently not available.

REACH 5

Most of the land in Reach 5 is managed by the Service and not used for agricultural purposes. Agricultural zoning is present, however, in portions of the reach located in Yuma County, which are zoned as Rural Area (this zone is the equivalent of agricultural zoning in Yuma County). This district is intended to permit uses that are compatible with the use of the land for agriculture, farming, and open space preservation. The predominantly rural character of Rural Areas is to be maintained. Permitted uses include single family residences, farms and ranches, public schools and hospitals, hunting and fishing clubs, agricultural processing, public parks or buildings, and public or private utility installations. The Rural Area district would allow for establishment of wildlife habitat, including the establishment of fish rearing ponds; however, fish ponds may not be permitted in the areas that would conflict with airport land use plans (see section 3.8.2.1) for a more detailed discussion of this issue (personal communication, G. Gallagher 2003).

The La Paz County zoning maps are in the process of undergoing revisions to obtain consistency with the County's first Comprehensive Plan which is currently being developed. Therefore, accurate zoning information for La Paz County is currently pending.

REACH 6

Reach 6 includes lands zoned for agriculture in the city of Yuma, Imperial County, and Yuma County. The northwestern portion of the city of Yuma is zoned mainly as Agriculture (AG). The principal purpose of this district is to conserve and protect farms and other open land uses, foster orderly growth in rural and outlying areas, and prevent urban and agricultural land use conflicts. Principal permitted uses include commercial breeding, dairies, grazing, nurseries, riding stables, public utility buildings, single family residences, aviaries, and facilities necessary for service to the surrounding territory. Habitat conservation areas would be allowed in the AG district (personal communication, M. Spriggs 2003).

The Imperial County lands in Reach 6 are zoned as General Agriculture (A-2). (See the discussion under Reach 4 regarding uses allowed in this zone.) The Yuma County areas are zoned as Rural Area (see description of this zone under Reach 5).

REACH 7

The lands within the city of Yuma in Reach 7 are predominantly zoned as Agriculture (AG) on the western periphery of the city. (See the discussion under Reach 6 regarding allowable uses in this zone.) Yuma County lands with Reach 7 are mainly zoned as Rural Area (see the description of this zone under Reach 5).

The City of Somerton is also located within Reach 7 and has a small land area zoned for agricultural use (AG) on the eastern side of the city. This zone conserves and protects farms and other open land uses, fosters orderly growth in rural and outlying areas, and prevents urban and agricultural land use conflicts. The primary purpose of requiring minimum lot sizes is to discourage small lot or residential subdivisions where public facilities and governmental services could not reasonably be made available in the future. Principal uses include aviaries, corrals, grazing fields, public utility buildings, and public and private wild preservation areas. The Conservation Plan would be allowed in this district (personal communication, F. Villegas 2003).

Lands Subject to Williamson Act Contracts

This discussion is applicable only to lands within California, and more specifically to Reach 4 of the LCR. Approximately 25,484 acres of land under Williamson Act contracts are located within this reach, primarily in the Palo Verde Valley. This constitutes approximately 9 percent of the total area of the reach.

The Williamson Act provides an incentive program for farmers to continue agricultural use on their property. The statute authorizes cities and counties to create agricultural preserves in which land uses are limited to agricultural and compatible uses. Landowners may enter contracts that limit their property to commercial agricultural use for a rolling ten-year term in exchange for reduced property taxes. The contracts must exclude "uses other than agricultural, and other than those compatible with agricultural uses" (Cal. Govt. Code §51243[a]). Since

agricultural uses are defined as "producing an agricultural commodity for commercial purposes" (Cal. Govt. Code §51201[b]), the acquisition of lands with Williamson Act contracts would generally be precluded for the proposed Conservation Plan, unless the contract can be terminated or the local government agency allows the use of the land for wildlife conservation as a compatible use.

Not all lands within an agricultural preserve created pursuant to the Williamson Act are subject to contracts. The city or county must restrict the use of such lands by zoning or other means so as not to be incompatible with the agricultural use of lands in the preserve (Cal. Govt. Code §51230). The Act contains separate provisions that discourage the locating of public improvements within an agricultural preserve (Cal. Govt. Code §51292), and provide the local government agency and State Director of Conservation with the right to sue to enforce these provisions (Cal. Govt. Code §51294). However, these provisions do not apply to the location or construction of "(p)ublic works required for fish and wildlife enhancement and preservation" (Cal. Govt. Code §51293[e][2]). Under this exception, the LCR MSCP participants would be allowed to acquire and use non-contract lands within an agricultural preserve for the purposes of establishing habitat.

3.2.1.2 Muddy River/Moapa Valley and Virgin River

Important Farmland

Table 3.2-5 shows the amount of agricultural land present in the three off-site conservation areas. Most of the approximately 4,555 acres of agricultural land in this area is located in the Muddy River/Moapa Valley, rather than the Virgin River. This off-site conservation area is located within Clark County, where Important Farmland has not been mapped. The amount of land in agricultural production has not changed substantially in recent years.

Land Zoned for Agricultural Use

This off-site alternative conservation area is located within Clark County. The zoning is predominantly R-U. See the discussion above regarding this zoning district.

3.2.1.3 Bill Williams River

Important Farmland

The Bill Williams River forms the boundary between Mohave and La Paz counties. Most of the approximately 3,387 acres of agricultural land in this area is located in Mohave County, where Important Farmland has not been mapped. Much of the agricultural land in this area is located within Planet Ranch, where the amount of land in agricultural production has not changed substantially in recent years.

Land Zoned for Agricultural Use

Mohave County areas within this off-site conservation area are zoned as Agricultural Residential (A-R) (personal communication, B. Delmar 2003). See the discussion under Reach 3 of the LCR for the allowable uses in this zone.

The La Paz County zoning maps are in the process of undergoing revisions to obtain consistency with the County's first Comprehensive Plan, which is currently being developed. Therefore, accurate zoning information for La Paz County is currently pending.

3.2.1.4 Lower Gila River

Important Farmland

The lower Gila River is located within Yuma County. Approximately 82,840 acres of Important Farmland are located within this off-site conservation area, including 75,965 acres of Prime Farmland and 6,875 acres of Unique Farmland. This comprises approximately half of the total area. Approximately 79,421 acres within this off-site alternative location have been designated as general agricultural land (Ogden Environmental 1998). This information was obtained from the Gap Analysis Program (GAP) (a program that provides mapping of land cover types). Similar to the LCRAS, GAP uses different parameters for mapping general agricultural land than those used in the Important Farmland data, resulting in some discrepancies between the totals.

According to the Wellton-Mohawk Irrigation District, there essentially has been no change in the amount of agricultural land in this area since the mid-1990s (personal communication, W. West 2003).

Table 3.2-5. Agricultural Land in the Off-Site Conservation Areas

Off-Site Conservation Area	*Agricultural Land (acres)*[1]	*Percentage of Total Area*
Muddy River/Moapa Valley and Virgin River	4,555	24
Bill Williams River	3,387	16
Lower Gila River	79,421	52
Total	**87,363**	**45**

[1]*Source*: Ogden Environmental 1998 (based on GAP).

Land Zoned for Agricultural Use

The Yuma County zoning for the lower Gila River area is primarily Rural Area (see description of this zone under Reach 5 of the LCR). The single largest zone in the town of Wellton is Agricultural; approximately 50 percent of the incorporated area is zoned as such. Habitat conservation areas would be allowed in this zoning district.

3.2.2 Environmental Consequences

Significance Criteria

The proposed action would result in a significant impact if it would:

- convert a substantial portion of the available Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland) in the project area to nonagricultural use;
- conflict with existing zoning for agricultural use, or other legal protections for agricultural use; or
- involve other changes in the existing environment, which, due to their location or nature, could individually or cumulatively result in substantial loss of Important Farmland to nonagricultural use or a loss of agricultural productivity.

3.2.2.1 Alternative 1: Proposed Conservation Plan

Conservation measures would be implemented on agricultural or undeveloped land. The most likely scenario would include a mix of such lands, but in order to ensure that the maximum potential impact is considered, the analysis assumes a worst-case scenario; i.e., that all habitat establishment would occur on agricultural land.

Impacts

Lands subject to Williamson Act contracts would not be acquired for the Conservation Plan unless the responsible local agency agreed that the contract terms allow the establishment and maintenance of conservation areas as a compatible use, and that there is no significant adverse impact from the use of non-contract lands within an agricultural preserve because fish and wildlife enhancement and preservation is a compatible use of such lands.

Wildlife habitat likely would be considered a permitted use or a conditionally permitted use in the areas zoned for agricultural use potentially affected by the proposed action, as described above. Additionally, compatibility with zoning would be one of the factors considered during the site selection process. Thus, conflicts with agricultural zoning would not occur.

Other than those impacts described below, implementation of the proposed action would not adversely affect agricultural uses of nearby lands. Access would not be restricted to these lands, nor would they be affected by the application of pesticides on the conservation areas. Pesticides are commonly used in agricultural areas, and they would be applied in a manner that would be consistent with accepted practices and regulatory requirements.

Impact AG-1: Important Farmland could be converted to a nonagricultural use. The proposed action would establish 8,132 acres of conservation area. If the entire amount were implemented on Important Farmland, it would constitute approximately 3.6 percent of the total known to be present in Reaches 4 through 7, the only reaches where Important Farmland mapping has occurred. It also is possible that unmapped Important Farmland is present in other reaches and could be used for habitat establishment. If this were the case, it would reduce the total percentage of Important Farmland converted to habitat. The conversion of Important Farmland to nonagricultural use would be *less than significant* because a substantial amount of Important Farmland would not be converted to nonagricultural use. Additionally, during the site selection process, the amount and importance of the farmland would be considered before specific sites are selected, as required by the Farmland Protection Policy Act. The significance of this potential impact would be further minimized by the implementation of a number of

covered activities, described in detail in section 2.5.3.3 of the LCR MSCP BA, that would more than offset impacts of the proposed action. These include the (1) CRIT plan to bring an additional 25,000 acres into agricultural production should Congress appropriate adequate funds; (2) Fort Mojave Tribe plan to fully develop its farmland, which would increase farmed acreage by approximately 3,745 acres; (3) the Chemehuevi Tribe plan to irrigate up to 1,855 acres of agricultural land; (4) Fort Yuma Agency plan to irrigate 650 acres of agricultural land; and the (5) Cocopah Tribe plan to irrigate three agricultural sites, totaling 500 acres.

Impact AG-2: Waterfowl attracted to established backwaters and marshes could destroy crops grown on adjacent farmland. The species for which cottonwood-willow and honey mesquite habitat is being established would not impact crops grown on adjacent farmland because they eat insects rather than grains, fruit, and other crops grown in the planning area. Waterfowl, such as ducks and geese, that are attracted to newly established aquatic or wetland areas (particularly marshes and backwaters), could, however, consume crops on adjacent farmlands. The amount of marsh and backwaters that would be established is, however, small in comparison to that which currently exists in the planning area. (The Conservation Plan would result in the establishment of 512 acres of marsh and 360 acres of backwaters. For purposes of comparison, the LCR MSCP HCP indicates that approximately 12,000 acres of marsh are present in the planning area, and a backwater study of Reaches 3, 4, 5, and part of 6 identified 7,911 acres of open water [GEO/Graphics 2000]). The establishment of this comparatively small amount of marsh and backwater would not attract sufficient wildlife to result in the loss of agricultural productivity, and the impact would be *less than significant*.

Impact AG-3: Runoff from established conservation areas could alter the slopes of adjoining laser-leveled fields. Laser leveling is used to improve agricultural efficiency by contouring fields to allow moisture conservation and improve drainage. If the drainage from the newly established conservation areas exceeded the existing discharge rate, this could result in the alteration of slopes on adjacent laser-leveled fields. This would result in the loss of agricultural productivity on such lands, which would be a *significant impact, but mitigable to less than significant* through the implementation of **Mitigation Measure AG-1**.

Impact AG-4: Covered species attracted to established conservation areas could disperse to other lands within the planning area. The successful establishment of habitat for the covered species in the conservation areas may result in an increase in the number of individuals of those species within the planning area[1]. Dispersal of adults and juveniles from the conservation areas to other lands with suitable habitat within the planning area, with subsequent potential for such lands to be used as breeding, resting, or foraging habitat, is likely to occur. Agricultural lands within the planning area generally do not support habitat characteristics that would encourage covered species to become resident on these lands, however. Such lands have limited insect populations due to pesticide treatments to control crop pests, and the crops that are grown on agricultural land are unsuitable as roosting or resting habitat, which would limit the use of

[1] Only increases in populations of covered species that are protected under the ESA or specific state law could potentially affect agricultural resources. Although the LCR MSCP participants are requesting incidental take coverage for a number of species not listed under the ESA, that coverage does not come into effect unless or until the species is listed. There is no requirement for coverage for incidental take for any unlisted species by any agency or individual within the planning area. Thus, use of any lands outside the conservation areas by covered, but unlisted species, would not potentially require changes to land management.

these lands by birds and bats. Moreover, the conservation areas are more likely to contain better foraging resources than the adjacent agricultural lands. While insectivorous birds and bats may visit adjacent farmlands for limited foraging, effects to agricultural resources would be *less than significant.*

Mitigation Measures

AG-1 Grading plans shall be developed for newly established conservation areas that direct runoff away from adjacent agricultural lands to ensure that flow rates from the conservation area do not exceed existing discharge rates. (*Addresses Impact AG-3*).

Residual Impacts

Residual impacts would be *less than significant* given the implementation of **Mitigation Measure AG-1** because flow rates would not exceed existing discharge rates.

3.2.2.2 Alternative 2: No Action Alternative

Impacts

Under the no action alternative, it is likely that conservation measures similar to those included in the proposed action would be implemented because compliance with the ESA still would be required for the covered activities, although some conservation could occur in the off-site conservation areas (as described in section 3.2.2.4 below), as well as along the LCR. **Impacts AG-1 through AG-4** apply to Alternative 2. The no action alternative is likely to result in the establishment and maintenance of less riparian vegetation. The same types of impacts would occur as described for the proposed action, but the overall magnitude could be lessened since a smaller amount of conservation area would be established. In addition, as described in Chapter 2, the smaller size of mitigation sites required as mitigation for individual projects would result in limitations on site selection criteria and would likely cause the mitigation to be located in more developed areas where land has been subdivided. This could further reduce impacts to agricultural resources.

Mitigation Measures

Mitigation measures would be developed as appropriate in the course of project-specific environmental reviews. If a significant impact were identified, a mitigation measure similar to that identified in this EIS/EIR (**Mitigation Measure AG-1)** could be implemented. Developing and implementing such a mitigation measure is outside the authority of the lead agencies and is beyond the scope of this EIS/EIR.

Residual Impacts

Residual impacts would be *less than significant* because a mitigation measure is available that would reduce or avoid significant impacts to agricultural resources.

3.2.2.3 Alternative 3: Listed Species Only

Impacts

Impacts AG-1 through AG-4 apply to this alternative, although since a smaller amount of conservation area would be developed than under the proposed action, the impacts to agricultural resources described in **AG-1, AG-3, and AG-4** would be even less than described for Alternative 1 because there would be reduced use of agricultural lands. The impacts to agricultural productivity from waterfowl (**AG-2**) would be substantially similar to the impact described in Alternative 1 and *less than significant* because the acreage of established backwaters would be the same.

Mitigation Measures

Mitigation Measure AG-1 applies to this alternative.

Residual Impacts

Residual impacts would be *less than significant* given the implementation of **Mitigation Measure AG-1** since flow rates would not exceed existing discharge rates.

3.2.2.4 Alternative 4: Off-Site Conservation

Impacts

Impacts AG-1 through AG-4 generally apply to this alternative, although impacts other than those associated with backwater establishment and other fish conservation measures would occur outside the planning area. Under this alternative, a total of 7,772 acres of conservation area would be established within the off-site conservation areas. Assuming an even distribution among the three areas, approximately 2,590 acres would be established in each. Important Farmland has been mapped only along the lower Gila River; however, as a worst-case scenario, it is assumed that all known farmland is Important Farmland. If all conservation area establishment occurred on farmland, it would represent approximately 57, 76, and 0.03 percent of the total farmland within the Muddy/Virgin, Bill Williams, and lower Gila River off-site conservation areas, respectively. While this would constitute a substantial portion of the farmland present in the Muddy/Virgin River and Bill Williams River conservation areas, it would not represent a substantial portion of the farmland available in the general area (the adjacent planning area contains approximately 269,000 acres of general agricultural land and approximately 224,200 acres of Important Farmland). This impact would be *less than significant*, as described for the proposed action under **Impact AG-1**. The impacts described in **Impact AG-2** would be similar to those described for Alternative 1 because the marsh and backwaters would be located in the planning area.

Mitigation Measures

Mitigation Measure AG-1 applies to this alternative.

Residual Impacts

Residual impacts would be *less than significant* given the implementation of **Mitigation Measure AG-1** since flow rates would not exceed existing discharge rates.

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